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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,080	03/01/2002	Hing Y. To	42390P12358	4275

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EXAMINER

PATEL, NITIN C

ART UNIT	PAPER NUMBER
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2116

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/090,080

Applicant(s)

TO ET AL.

Examiner

Nitin C. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 is/are allowed.
- 6) ☒ Claim(s) 17 and 26 is/are rejected.
- 7) ☒ Claim(s) 18-25 and 27-30 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1 – 30 are presented for examination.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 17, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Akashi, US Patent 6,178,212 B1.
4. As to claim 17, Akashi discloses an apparatus [retiming circuit] comprising:
 - a. a receiver interface [inherent to the circuit for receiving inputs Din, CLK] with one or more inputs to receive one or more data streams [Din]; and
 - b. a clock synthesizer [23, reference clock generator] coupled to the receiver interface [CLK] to generate an internal synchronization clock [Cref] for sampling a received data stream [Din], the clock synthesizer to generate the internal synchronization clock by detecting transition edges [rising and falling edges] of a calibration data pattern [Din][col. 1, lines 50 – 67, col. 2, lines 1 – 7, col. 4, lines 26 – 62, col. 10, lines 1 – 27, fig. 1, 13].
5. As to claim 26, Akashi a system comprising:

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a. a memory [26, memory] subsystem to store data [to store data is inherent property of memory];

b. first device [20, retiming circuit] communicatively coupled to the memory subsystem to receive a data stream [Din] from the memory subsystem, the first device including clock synthesizer [23, reference clock generator] to generate an internal synchronization clock [Cref] for sampling the data stream [Din] by detecting transition edges [rising and falling edge] of a calibration data pattern [Din] transmitted by the memory subsystem [col. 1, lines 50 – 67, col. 2, lines 1 – 7, col. 4, lines 26 – 62, col. 10, lines 1 – 27, fig. 1, 13, 15].

6. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested to the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

7. **Prior Art not relied upon:** Please refer to the references listed in attached PTO-892, which, are not relied upon for rejection since these references are relevant to the claimed invention.

Allowable Subject Matter

8. Claims 1 – 16 are allowed.

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9. Claims 18 – 25, and 27 – 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The independent claim 1, is allowable over the art of record and none of references, either alone or in combination, discloses or renders obvious a method for generating a synchronization clock as claimed by selecting a first sampling clock and a second sampling clock so that one clock lies on each side of the midpoint of a calibration data unit, the calibration data unit having transition edges with the midpoint of the calibration data unit centered approximately between with the transition edges, and interpolating between the first and second sampling clocks to synthesize the synchronization clock, one edge of the synchronization clock located substantially at the midpoint of the calibration data unit.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin C. Patel whose telephone number is 571-272-3675. The examiner can normally be reached on 6:45 am to 5:15 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on 571-272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nitin C. Patel
March 3, 2005


LYNNE H. BROWNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100